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FINANCING EU STUDENT MOBILITY:
A Proposed Credit Union Scheme for Europe†

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ABSTRACT
Governments worldwide face the challenge of financing a growing student population with limited resources, especially in the current context of difficult economic recovery. Student loan schemes, because they appear as cost-efficient and are defendable on the lines of social equity (students invest in their future), are increasingly politically attractive. It was therefore only a matter of time before the European Union considered the feasibility of implementing a similar scheme. Such a lending scheme faces EU-specific limitations. The Union has more limited resources than a fully-grown government. It is also bound by Treaty rules to complementary competencies and has to accommodate various levels of member states' willingness to integrate further. This paper offers a general discussion on the design of an EU-wide lending scheme for students. It argues in favour of a European Credit Union for Students, an EU-wide agency liaising with the European Investment Bank to raise the necessary funds and subcontracting other institutions for the administration of the loans. This agency would start by financing loans for the relatively narrow pool of mobile students under the Erasmus scheme. Doing so, it would lay down the foundation for a further integration of financing capacities as/if the Union becomes ever closer.

Student mobility is growing fast within the European Union (EU). It shot up by 120 percentage points between 2000 and 2008[i]. Yet, the policy discourse regarding the mobility of students is at odds with the material resources put forward to support such mobility[ii]. On the one hand, policy-makers advocate student mobility across the EU as a way to acquire the skills necessary to train a competitive workforce and contribute to building the European Union[iii].

On the other hand, the material resources put forward to facilitate intra-European mobility are not sufficient. Mobility is possible only for those who can afford it[iv]. A grant of 272 euros per month[v] theoretically covers the additional costs of studying abroad for a year as part of the EU's flagship exchange programme Erasmus[vi]. But this grant actually covers only 35% of the total costs of a year of studies abroad. The remaining 65% is difficult to finance, leaving 47% of students abroad to rely on family income, which is clearly a barrier to equity of access[vii]. Students across most member states are not able to rely on the grants and loans that they usually have. Not all member states make their grants and loans fully portable and accessible to non-nationals[viii]. And a survey of 9,000 Erasmus students found that 57% of them had financial problems abroad[ix].

An EU-wide agreement to provide more comprehensive financial aid for mobility hurts itself to two difficulties of political and economic nature. Politically speaking, it is difficult for member states to agree across the EU because increasing grants for mobility would be a form of redistribution from one group of countries to another[x]. Grants are paid for by all EU member states but spent in countries of destination, which tend to represent a select few member states (France, Germany and the UK[xi]). In terms of the economy, financial resources for all forms of public spending are more constrained as a result of the Recession.

How can the European Union help students finance their mobility experience in a cost-efficient and politically sensible manner?

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This paper presents and discusses general design options for an EU-wide financial aid scheme. It aims at offering a preliminary overview to inform the debate on financial aid for students in the European Union, and in particular the European Commission's reflection regarding the feasibility of an EU-wide lending scheme. This paper argues that a European lending agency collaborating with the European Investment Bank (EIB) and other lending institutions, in addition to some subsidies on loans by the European Union, would respond to the needs of students to pay for their stay abroad on top of the Erasmus grant while respecting European political and economic constraints.

More importantly, the European Credit Union Scheme for Students would represent a significant development in the history of redistribution in the European Union. It could progressively be extended, for example to finance additional study programmes, if/as the Union becomes ever closer.

1. THE NEED FOR A GREATER INVOLVEMENT OF THE EUROPEAN UNION

Financing student mobility across the European Union represents a typical prisoner's dilemma.

Member states would benefit from encouraging mobility by increasing financial support (and obtain a payoff of (3; 3) in Table 1)[xii]. But they are more likely to want to avoid financial contributions and hope to free ride on another contributor, yielding a payoff of (4; 1). If each member state applies the same reasoning, no member state has an incentive to contribute to student mobility and they both end with a payoff of (2; 2).

Moreover, negotiating multilateral agreements is costly. Member states are more likely to reach bilateral or small scale agreements than EU-wide ones, which limits the movement of students to member states included in the agreement.

Table 1: Financing student mobility, a prisoner's dilemma

		Member state 2	
Member state 1		Contribute	Do not contribute
	Contribute	3; 3	1; 4
	Do not contribute	4; 1	2; 2

An action at the level of the European Union is necessary to move member states away from this sub-optimal equilibrium.
This theoretical idea underlines the growing debate regarding the financing of mobility in the European Union. This debate emerged in the early 2000s. European ministers agreed that loans and grants should be portable across Europe with the Berlin communiqué of 19 September 2003. A few years later, two EU institutions roughly akin to an executive and a legislative body, the European Commission (2006) and the European Parliament (2008), recommended that member states set up loan schemes to finance higher education.

Three deliberative instances were set up to elaborate ways to think of implementing these principles at the EU level over the past few years. The Bologna process, a European-wide process to reform higher education, saw several working groups occurring on the portability of loans and grants which allowed for the exchange of good practice and reflected other activities in the EU, e.g. Cluster on cooperation between member states on good practice regarding mobility in 2008. That same year, a High Level working group urged the EU financing institution EIB to think about the matter of student financing in 2008. The EIB responded by organising a general conference in January 2009. A few months later, the European Commission financed a feasibility study on a student lending facility to finance the mobility of students in 2009, the final report of which is due early in 2011.

2. FINANCING MOBILITY THROUGH LOANS

The idea of an EU-wide lending facility has seduced several EU institutions over the past years because of its political, legal and economic appeal[xiii]. At the political level, loans are less likely to be perceived as a form of redistribution from one member state

to another, simply because they have to be repaid. Hence a lending scheme, depending on its design, would be more likely to be adopted than an increase in grant.

In legal terms, the lending facility would not overstep the competences of member states since it would be designed to support mobility only. The Treaties indeed set strict limits on EU's actions through the principles of subsidiarity and proportionality. These principles respectively state that the Union cannot take action unless it is more effective than action taken at national, regional or local level and that when various forms of intervention are available to the Union, it must, where the effect is the same, opt for the approach which leaves the greatest freedom to the Member States and individuals (article 5 TEC).

And the European Union has limited powers in education, including higher education. According to articles 149 and 150 TEC, the European Union can only complement the actions of member states and encourage cooperation.

In economic terms, loans appear cheaper than grants for lenders, which is an important consideration given the costs of financing a full mobility experience.

Table 2: Estimated costs of mobility within the Erasmus programme (in euros for an academic year of 44 weeks[xiv]

		2008/2009	2009/2010 [1]
Individual costs	Estimated average cost of living for a year of studies [2]	6,897.66	6,966.63
	Estimated average fees [3]	600.24	606.24
	Sum costs of living and average fees	7,497.90	7,572.87
	Erasmus grant	2,550.00	2,720.00
	Cost not covered by Erasmus grant	4,947.90	4,852.87
Aggregate costs	Number of ERASMUS students	198,568.00	214,434.00
	Cost of Erasmus grant (Erasmus grant * number of students	506,348,400.00	583,260,480.00
	Total expenditure (Sum costs * number of students)	1,488,843,007.20	1,623,880,805.58
	Total expenditure - Erasmus grant	982,494,607.20	1,040,620,325.58

Note 1: growth of student for 2009/2010 based on an average of the growth rate in the three previous years.
Note 2: average fees and costs of living were estimated by taking into account estimates by EACEA (2009: 146-48) and Carbonell (n/a). Estimates for the costs of living based on 2005/06 figure of 6,363.04 euros (Carbonell, n/a). Costs of living include accommodation, food and other costs. But they do not include transport costs. Estimates for the average tuition fees based on 2008/09 figure of 600.24 euros (EACEA, 2009:146-48). The inflation rate is measured using Eurostat's indicator, i.e. the annual average rate of change in Harmonised Indices of Consumer Prices (HICPs). Harmonised Indices of Consumer Prices (HICPs) are designed for international comparisons of consumer price inflation. HICP is used by the European Central Bank for the monitoring of inflation in the Economic and Monetary Union and for the assessment of inflation convergence as required under Article 121 of the Treaty of Amsterdam (Eurostat, 2010). HICP rates were 2.2% for 2005/06 and 2006/07, 2.30% for 2007/08, 3.7% for 2008/09 and 1% for 2009/10.
Note 3: fees and other contributions include tuition fees, contribution to student organisations and health insurance, registration fees, entrance fees and certification fees. Fees and other contributions are averaged for the EU-27 for qualification levels ISCED 5A and 5B.

A mobility scheme would require an additional funding of 1.04 billion euros to finance the overall average costs of a year abroad for all Erasmus students for 2009/2010 beyond the Erasmus grant (see Table 2). Most importantly, loans bear many advantages to students and the general taxpayer. They represent a way to match student requests for fund to their future income and make students invest in their higher education[xv]. And graduates should pay for their higher education since they benefit from an income premium. This is fairer than having the general taxpayer, who may not have benefited from a higher education degree, subsidise students and graduates.

Yet, only 3% of students use loans, public or private, to finance their mobility experience[xvi]. The rare use of loans is likely come from difficulties related to a perception of the debt as a risk. Two features of the loans can contribute to remedy this issue.

3. INCOME-CONTINGENCY WITH FLEXIBLE REPAYMENTS

The European Commission has advocated a repayment conditional on income to deal with the perception that loans represent a risk[xvii]. Income-contingent loans, also called income-related, or contingent repayment loans, imply fixed monthly or annual repayments including interest rate repayments. Graduates only start these repayments if their income is above a certain threshold. Income-contingent loans are seen as an alternative to conventional fixed-schedule loans, also called conventional or mortgage-type loans.

In conventional fixed-schedule loans, the monthly schedule of repayments, the interest rate and the repayment period are fixed in the contractual repayment agreement. But the annual burden of the payments varies. The burden of payment is a function of the initial size of the debt, the interest rate, the repayment period and how the resulting monthly payment compares to the borrower's monthly or annual income[xviii].

Income-contingent loans have become increasingly popular. Governments in many countries, including Australia, New Zealand, the UK and Hungary, have adopted them (see appendix 1)[xix]. Proponents of income-contingent loans argue that they are fair, since only those who can afford it repay, as well as easy to understand and manage, since repayments are fixed[xx].

Table 3: Average annual income of recent university graduates

Member state	Average annual income (in euros)
Bulgaria	3,600
France	24 220
Germany	41,136
Hungary [1]	12,800
Netherlands	28,000
Sweden	31,072
UK	24,965

Source: EPI (2005:12); Prospects (2008, 2009)
Note 1: This figure is the average annual income in the field of business.

But income-contingent loans are not flawless. They can be burdensome on the public purse depending on the contingency threshold. The lending institution may be left with a large debt to deal with due to the condition of repayment of this loan. Indeed, lenders rely on selling the debt on the capital market to private buyers to relieve them of some of the costs of the loans. Private investors are more likely to want to buy loans that they know are going to be repaid.

But there is no guarantee on the value of the income premium of a graduate. Graduates may be out of employment for some time after graduation or other life events may lead to them renegotiating the terms of repayment. And income-contingency implies that non-repayment is higher than in conventional loans, where lenders have to repay at the contractually agreed date. Hence the debt related to income-contingent loans may be less likely to find private buyers[xxi].

The British Government will therefore probably have to sell the student-related debt, which was estimated at around 30 billion euros in 2009[xxii], much below its actual value if/when it announces its sale.

Income-contingent loans are not only costly to the lender. Eligible borrowers may find that repayment conditions are less flexible than in a fixed income schedule, which does not cater for variations in income conditions[xxiii].

Johnstone (2009) therefore recommended a more flexible repayment schedule on income-contingent loans. Borrowers would repay on a fixed schedule unless the monthly or annual repayments exceeded some maximum percentage of monthly or annual earnings. In that event, amounts owed in excess of the threshold would be deferred (and the interest compounded). This would allow borrowers to adjust their repayment proportionally to a dip in income for a year or two before they can return to a fixed schedule repayment. This modality allows for some form of subsidies, since a long-term period of unemployment may lead to an incomplete repayment of the loan and remaining debts may be forgiven at some point.

But flexible repayments would make this hybrid system less costly than the subsidies of a traditional income-contingent loan. Lenders could also allow the interest rate to periodically be changed to adjust the costs of the loans to variations in the rate of inflation.

Fixing an income-contingent threshold will require a decision based on political as well as economic considerations because of the variations in average income-level in the European Union. The threshold for an income-contingent repayment could for example be set at the average annual income of a graduate in his member state of employment.

Given the disparities in average annual income for university graduates presented in Table 3[xxiv], the monthly amount and length of repayment will vary depending on the member state of employment and will be discussed with the lender. For example, it would take a graduate paid the average income of Bulgaria (i.e. 3, 600 euros) close to 28 years to repay a loan of 5, 000 euros if he repaid 5% of the principal value of his loan every month[xxv]. It would take a German graduate earning an average starting salary of 41,136 euros just over two years if he had to repay 5% of his income into the loan.

Despite such disparities, the value of the loan is small enough so that graduates in every member states should be able to repay the amount of the loan based on his average income in each EU member state.

4. POSITIVE REAL INTEREST RATES

Another proposition, supported by the European Parliament (2008), consists in setting up interest free loans. Interest free loans are akin to a subsidy from lenders toward borrowers and are in place in England where students only pay for the rate of inflation with zero real interest rate.

Some form of subsidy on the rate of interest is necessary to make the advertised scheme more competitive than loans offered by other lenders and to provide an incentive to students to take up these loans. But a full subsidy is costly and socially regressive.

Simulations by Barr and Falkingham (1993, 1996) on the British system found that the subsidy on interest rate costs 30 pounds out of every 100 the Government lends. In other words, the interest subsidy converts nearly one third of the loan into a grant.

Table 4: Simulation of repayment according to different calculations on interest rates (in euros)

		Zero real interest rate	Positive real interest rate
	Principal only	Simple interest rate HCIP only at 2.28%	Commercial bank rate simple interest and fixed rate: 3.56% [1]
Total to pay over eight years	4,852.87	5,738.03	6,234.97
Monthly repayment over eight years	50.55	59.77	64.95

These estimates assume that repayment will take place upon completion of studies over a period of eight years.
Note 1: Interest rate from BNPParibas (2010).

This subsidy is also particularly regressive since it occurs at the time of repayment, which actually means that the lender subsidises graduates with higher income power and not students who are the most in need because of their low income. And interest subsidies can lead to a problem of arbitrage. Students who do not need the loan borrow as much as they are allowed to and put the money into a savings account to make a profit. In addition, the interest subsidy affects the quality of student support, since it crowds out the funding of universities. It impedes access since loans are expensive and therefore rationed[xxvi].

Loans with a real positive interest rate need not be significantly more expensive than loans with zero real interest rates. Table 4 indicates that lenders would end up repaying only around 5 extra euros a month with a positive real interest rate of 3.56%, the rate of commercial bank BNPParibas[xxvii], than with a simple interest rate including an inflation rate of 2.28% over four years.

Loans with real positive interest rates need not forcibly imply higher monthly repayments either. The length of the repayment period can be spread out, which is realistic under a financing scheme for mobility since mobility loans would be designed to finance one year of study (not a full undergraduate degree) and will therefore be relatively small, i.e. around 5,000 euros (see Table 2). The Browne review of higher education financing in the UK has therefore recommended that loans be charged a real positive interest rate equal to the Government rate of borrowing[xxviii].

5. MANAGERIAL DESIGNS FOR AN EU-WIDE LENDING FACILITY: OPTIONS AND SELECTION CRITERIA

The managerial structures of lending facilities vary across the EU and can be classified according to their level of centralisation. An EU-wide lending facility could either allocate loans through a decentralised system relying mostly on various lenders or through a centralised agency. It could also be a variation of these two and form the European Credit Union for Students, where an EU entity liaises with various other bodies to raise the necessary capital and to manage loans.

A European lending facility will need to be selected based on its ability to maximise the utility of the three main involved parties: a) student borrowers, b) lenders and c) member states.

a) Students are the main benefactors of the scheme and as such need to feel encouraged and confident in taking up loans. This implies that they have enough information, access to loans, and that their loans respect their price sensitivity[xxix]. Information is key to the success of an EU lending facility. Students need to know that this scheme exist, and they need to understand the conditions of the loans in order for them to feel comfortable financing their studies through loans[xxx]. Students also need to be able to access loans easily. Application procedures need to be as straightforward as possible, and loan provision relatively homogenous across the EU. Another criterion is price sensitivity. The interest rate placed on loans has to be low enough and repayments flexible enough not to deter students from taking up loans.

b) Lenders also need to be able to afford the scheme in a sustainable manner. Affordability can be, depending on the design of the lending facility, more constraining than in national lending schemes since the EU budget is more limited than the one of a government. Public spending in the UK was 5.35 times higher than the entire EU budget in 2009/2010[xxxi].

Table 5: Break-up of the costs of lending

Default
Design elements
e.g. subsidies on interest rates; Repayment conditions (income contingency)
Administrative costs
e.g. initial upfront costs to set up facility and processing costs
Costs of borrowing

The total costs of lending, including the costs of defaulting, design elements, administrative costs and the costs of borrowing as Table 5 indicates, will therefore have to be minimised.

c) Member states are the main political actors in the European Union and contributors to the EU budget. And most of them are currently in a fragile economic recovery. Therefore, the facility needs to limit the financial requirements placed on member states to obtain their support. It also needs to respect member states' legal competencies as defined by the Treaties and to act solely for the purpose of strengthening cooperation between states.

Table 6: Performance of the three potential designs in maximising the utility of students, lenders and member states

	Students			Lenders	Member states		
	Information	Access	Price sensitivity	Costs	Financial	Legal	Political
Decentralised system				x	x	x	x
Centralised system	x	X	X				
The European Credit Union for Students	x	X	X	x	x	x	x

Note: a tick means that criteria are fulfilled.

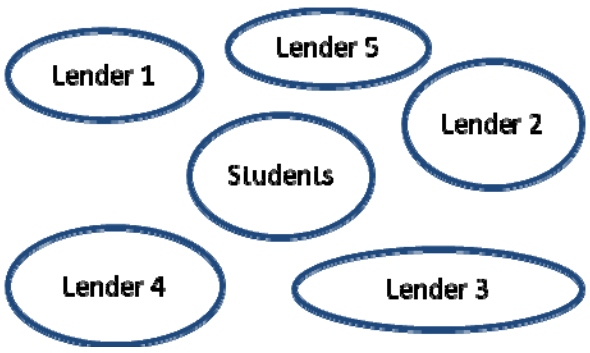
The rest of this paper discusses to which extent three different designs a decentralised system and a centralised system, which correspond to two ideal types, and a variation called the European Credit Union for Students - fit these criteria.

6. A DECENTRALISED SYSTEM

A first possible design is a decentralised system in which various lenders offer loans to students. Several lenders, typically commercial banks, finance student loans, traditionally using conventional-type loans.

This system has the advantage of transferring the costs of lending away from EU institutions and member states and toward other lenders. It also respects member states' political positions and legal competencies. But such system may not maximise the utility of borrowers as Table 6 illustrates.

Figure 1: A decentralised system



First of all, students may not be able to acquire comparable information on all the lending institutions in order to be able to rationally choose their lender[xxxii]. And a decentralised system could bias loan acquisition toward students from the most educated families who are able to better understand the modalities of the loans. Decentralised systems could also potentially lead to heterogeneous provision. Lenders may be based only in one or a few member states and different conditions may be offered across lenders, hence different access to loans across the EU. If the system relies on for-profit institutions, such as commercial banks, loans are likely to be costly to students since banks will consider the risks of non-repayment and if the loan is too risky, may be unwilling to grant loans.

Banks may also increase the cost of the loans, i.e. the interest rate or require a guarantor to cover the risk of non-repayment, which may deter students from taking up a loan. To reduce such costs, the French government guarantees loans up to 70% of its value to commercial banks.

The European Union could provide a similar guarantee to lower the costs of the loans. This assumes that some part of the European Commission or the European Investment Bank be created to manage the guarantee and that funds would be available to provide such guarantee (through the European Social Fund for example) which increases the costs to the EU. Moreover, a decentralised system solely reliant on commercial banks would be exposed to fluctuations in the capital market[xxxiii].

Commercial banks are not the only potential lenders in a decentralised system. Higher education institutions[xxxiv], non-profit institutions or regional and local authorities can and sometimes do also lend to students[xxxv]. These other forms of decentralisation may make it easier for students to acquire information, since the source of information would be closer to them.

But it would still lead to heterogeneous access and potential price sensitivity. Moreover, each of these designs faces particular challenges. Relying on higher education institutions assumes that these institutions have a high level of financial autonomy across the European Union, have the managerial capacity to take upon the burden of banking functions, and are able to manage their own finances, which may not yet be the case in many member states. Higher education institutions where students remain affiliated for their entire degree would presumably allocate the loans (institutions which welcome students may fear non-repayment when students go back to their member state of origin).

If higher education institutions encounter difficulties or high initial costs in setting up the loans, they may be deterred from encouraging the mobility of their students. The landscape of other non-profit private organisations is also much smaller in the European Union than in other areas of the world, such as the USA, which could make it difficult to rely solely on them to allocate loans.

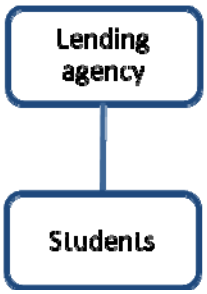
Financing mobility through regional or local authorities would have the advantage of being able to dab directly into a part of the EU budget called the European Social Fund (ESF). This fund is currently used to fund mobility, particularly in convergence areas where the ESF provides tertiary-level support[xxxvi]. But the complex and differing eligibility rules do not promote access for those who wish to benefit from a mobility experience[xxxvii].

An alternative and less obvious source of funding could come from national grant allocating bodies themselves. These national bodies could transfer the equivalent savings made on not having to finance a year of the curriculum spent on mobility to the European agency. But this request for transfer would require relatively lengthy negotiations and estimates. And member state governments would be more willing to transfer these savings toward other national expenditures than to an EU-wide project.

7. A CENTRALISED SYSTEM THROUGH AN INDEPENDENT AGENCY

Several member states have thus opted for a centralised system, where loans are provided by a public lending facility (Figure 2). The public body is typically an independent agency set up for the purpose of allocating loans. The existence of a public lending agency does not preclude other institutions from allocating student loans.

Figure 2: A centralised system



In Germany a public bank called the *Kreditanstalt für Wiederaufbau* provides additional loans to students on the side of the agency BAFöG for example.

There is a fair amount of variance in the responsibility of each one of these public agencies across Europe. For example, the Hungarian Student Loans Company *Diákhitel Központ* sells and manages the student loan book by itself; while the British Student Loans Company leaves the

management of the debt related to student loans to the Government and is financed by Government subsidies. Repayments are either collected through the tax system as in the UK, through monthly coupons, or both as in the Netherlands[xxxviii] (See appendix 2).

Let us assume the simplest form of centralised agency which would allocate loans and ensure their repayment on top of managing the related debt. This EU agency would be independent. Directorate-Generals of the European Commission would not have the human and material capacity, nor the mandate, to manage loans.

The European Investment Bank (EIB) traditionally allocates loans to SMEs or governments instead of individuals. The EIB is already involved in financing student loan schemes across Europe, for example lending to the Hungarian student loans' company. But integrating lending functions to the EIB would mean that loans would be less visible to students than a separate lending agency would be.

A separate agency, in the same manner as the Education, Audiovisual and Culture Agency (EACEA) would guarantee the most visibility and hence information and potentially access to students, contingent on appropriate advertisement and communication.

The agency would also isolate the costs of lending. It would insulate the administrative costs incumbent to loan management to a single unit. And exposure to the risks taken by lending could be minimised depending on the conditions of the loans. For example, the creation of a Student Loans Company in the UK did not prevent the Government from accumulating a large student loan debt. The reason for this was that the Government heavily subsidised loans (with no real interest rate) and directly took responsibility for the costs of non-repayment.

Although a centralised agency appears to be an attractive option in terms of access for students and managerial simplicity, financial and political considerations limit its feasibility at this stage of European Union history. A first limit is that the EU would have difficulty financing the scheme. The EU's investment in student loans would have to cover all the costs of the agency, including the administrative costs of allocating and repaying the loans themselves, for 200,000 loans of around 5,000 euros each per year in the case where each mobility student takes up a loan.

The costs of collecting repayment alone would be significant. If the agency collects repayments through income tax, locating graduates and negotiating partnerships with tax authorities in member states would be costly. This mode of repayment would also be sensitive politically, since the EU does not have competencies regarding the direct taxation of individuals. Relying on monthly coupons also leads to administrative costs since the agency will have to follow-up on graduates.

These costs would be difficult to finance based only on the EU budget. The European Commission (2008:14) discussed using two pots of money to cover mobility. The first one includes Structural funds and the 7th Research Framework programme. But the use of these programmes is difficult for mobility given current eligibility restrictions (geographic or subject specific).

The second pot is the Erasmus budget. At the moment, Erasmus only covers grants for mobility of a relatively small amount. The budget allocated to Erasmus-Mundus, which covers international mobility, has increased drastically over the past few years and is now up to one billion euros. Member states would need to agree to increase the budget of Erasmus further to be able to fund this agency. Such agreement is politically uncertain given the context of economic recovery.

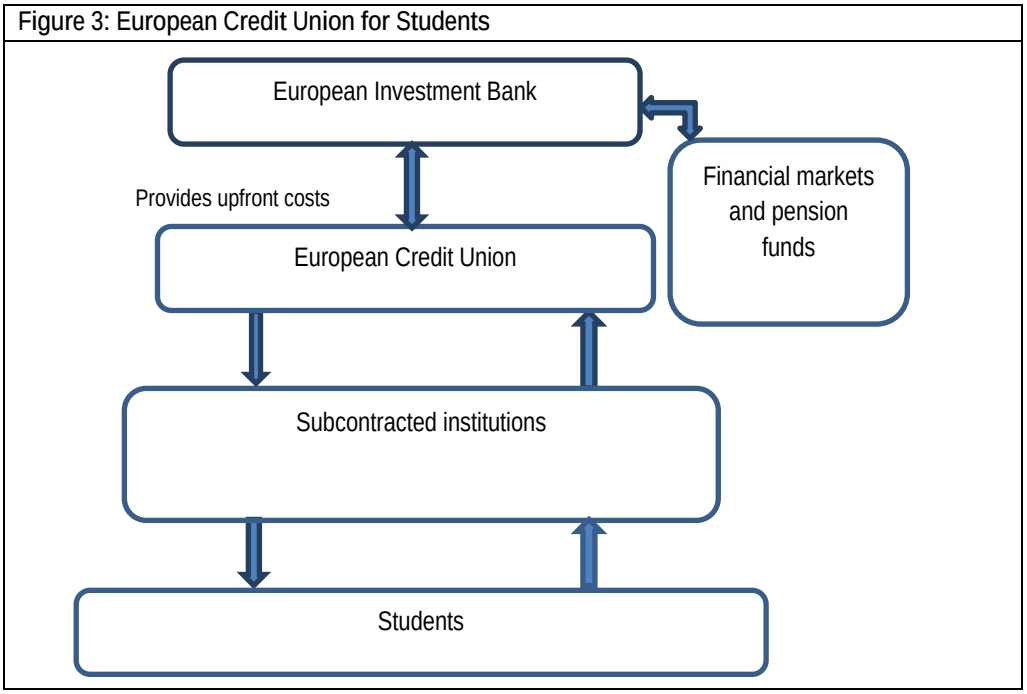
Another option, which is commonly used by several national governments and agencies, would be for the agency to raise money on the capital market. But the capacity of this agency to do so on its own would be more limited than it is for other lending agents, such as member state agencies or the US federal government. The packaged loans would be relatively small in value, and hence would be less liquid and desirable to financial investors than financial products issued by national public agencies or governments.

Finally, the visibility of an agency could also be perceived as a strong political signal regarding the growing role of the EU in redistributive policy areas and member states may be less inclined to support it in general.

8. THE EUROPEAN CREDIT UNION FOR STUDENTS

A final option would be a variation of this centralised agency called the European Credit Union for Students. The European Credit Union for Students would still play a central part in the lending process but relate to other institutions to raise capital to cover the costs of lending and to diminish the administrative costs related to managing loans, including allocation and repayment.

Figure 3: European Credit Union for Students



Although the European Credit Union would rely on other institutions for key aspects of the scheme, it is important to give it its own entity to increase visibility and attract students to the scheme.

The design of the European Credit Union for Students, which involves the EIB and other managing bodies, would also provide a political signal more in line with Treaty rules than a purely centralised agency (Figure 3). The European Credit Union for Students would initially be set up to finance Erasmus mobility programmes. But it could also expand its lending capacity to include other programmes if it is successful and as the EU becomes more integrated.

The European Credit Union would be the key manager. It would decide on the conditions of the loans (e.g. income-contingent threshold etc.). And it would secure the necessary capital to set up the facility and allocate loans to students from the European Investment Bank (EIB).

The EIB would raise the funds for the student loans as part of its regular access to capital markets. The fact that the EIB regularly issues bonds with an established investor base would ensure a better rate than an independent agency issuing bonds in its own name.

The relationship between the EIB and the European Credit Union can be formalised in different ways, possibly using existing EIB products and services, e.g. a special instrument such as the Structured Finance Facility designed to finance instruments with a higher risk profile than those normally accepted by the EIB.

Another way to raise money could be to have the European Credit Union or the EIB issuing a guarantee on financial products managed by banks, such as asset-backed securities. But an EU-27 guaranteed bond issued by the EIB is more likely to be preferred by investors than an asset-backed security issued by banks in the current financial context. And this age of economic recovery requires the Union to consider the most cost-efficient option.

The European Credit Union would also subcontract other institutions to administer the application, allocation, promotion and repayment of loans against a negotiated fee. This would relieve some of the administrative costs from the ECU and reduce the overall administrative costs by creating economies of scale since these subcontracted institutions would already have the capacity set up to handle loans. Subcontracted institutions would collect repayments through monthly coupons given the difficulties to use the income tax system pointed out above.

The European Credit Union would remain the entity which formally issues the loans and bears the risks of non-repayment. Having other institutions issuing loans with an EU guarantee could disincentivise these institutions to collect repayments, making it as costly for the Union as issuing the loans itself.

9. HOW MUCH WOULD THE EUROPEAN CREDIT UNION FOR STUDENTS COST?

Given that the European Credit Union for Students would bear the risks of the loans, a key determinant is how many borrowers would default on the loans. And the costs of defaulting could become a significant concern for a facility covering no less than all the 27 EU member states, with a target population of mobile graduates.

Table 7: Default rate in several countries (in %)

	Type of loan	Default rate
France	Government guaranteed loans	5
Hungary	Student loan company loans	0.5
UK	Government subsidised direct loans	41.08 [1]
Netherlands	Direct loans	n/a
Sweden [2]	Direct loan	17.99
Germany	Direct loans	n/a
Average		16.14

Source: CSN (2009), Ferreira and Farkas (2009), MEN (2008), SLC(2010)
Note 1: This percentage includes the number of loan holders who are not repaying after one tax year having been processed (SLC, 2010).
Note 2: This percentage includes the number of loan holders who are not registered and not obligated to repay their loans (CSN, 2009).

Default rates published by several national public agencies or their representatives amount to an average of 16.14% (Table 7). These rates are not easily comparable since they do not always rely on similar definitions. For example, they may take into account different periods of arrears before considering a borrower as defaulting.

Moreover, a lending facility for students benefiting from an EU mobility programme would have to take into account the fact that a larger proportion of its borrowers will be more mobile than the population of borrowers in member state schemes. Bracht et al. (2006: 21) found that 18% of Erasmus graduates are employed abroad within five years of graduation, which is according to them several times higher than among non-mobile graduates.

Depending on the conditions under which repayments take place, mobile graduates are more likely to default than graduates who take up employment in their member states of origin. For example, 64.5% of UK or EU borrowers who reside overseas do not repay their loans in England as opposed to 39% of borrowers who are UK residents[xxxix].

This figure is relatively high since the Student Loans Company (SLC) did not have any coercive measures against overseas loan holders until 2009. Since then, the SLC has started taking count of borrowers into arrears so that legal action may be brought against them[xl]. Mobile graduates may not necessarily result in such high default rate. Almost a third of US citizens live outside the state in which they were born[xli]. Yet the default rate on US student loans is 6% on average (7.2% on bank loans and 4.8% for loans directly managed by the Federal government)[xlii].

Predictions on the rate of default specific to European Credit Union for Students are difficult to make. An EU-wide public student lending facility has never existed before and cannot rely on past data. For argument's sake and to obtain a ballpark idea of the costs of defaulting, this paper estimates the costs of default using a lower and an upper bound prediction. The upper bound assumes a default rate of 27.75% (which is calculated based on the assumption that 16.14% for national residents and 64.5% of graduates who take up employment in another EU member state would default). The lower bound assumption uses the average default in the USA (6%).

These estimates are also modelled based on different numbers of students taking up a loan (25, 47 or 100%) and two principal values of loans : the full cost of the year abroad after the Erasmus grant (i.e. 4, 852.87 euros) and half of that value if students decide to use other sources of revenues such as part-time employment as well.

Figures 4 and 5: Estimates for the costs of default (in euros)

Figure 4 : Based on a default rate of 6%

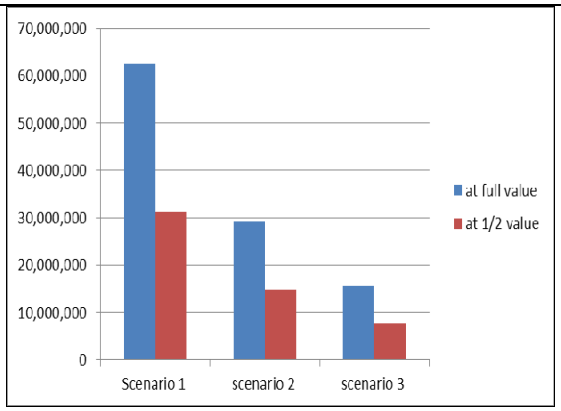
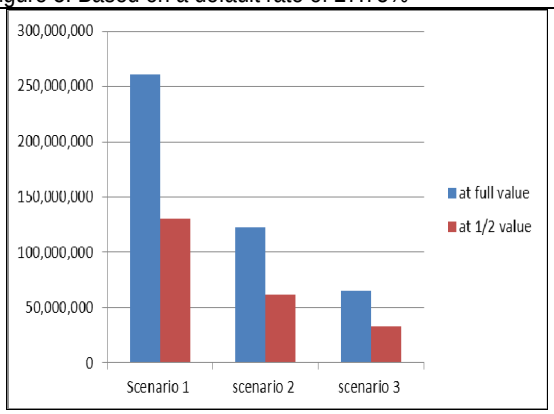


Figure 5: Based on a default rate of 27.75%



Scenario 1 = 100% of Erasmus students take up a loan
Scenario 2= 47% of Erasmus students take up a loan
Scenario 3 = 25% of Erasmus students take up a loan
Full value = the loan covers the costs of a year abroad after the Erasmus grant
½ value = the loan covers half of the year abroad after the Erasmus grant
Note: the default rates include the income-contingent threshold of countries taken as a benchmark.

Figures 4 and 5 show that the annual costs of default can vary from 7.8 million euros if 25% of students take up a loan covering half of the remaining cost of their year abroad to 260 million euros if all students take up a loan aiming at covering the full costs of their year abroad after reception of the Erasmus grant under differentiated default rates.

Other components of the costs of lending to students include the costs of borrowing from the capital market, which itself depends on how risky the loans are. Finally, the design of the loan itself, i.e. interest rate subsidies or repayment thresholds (income-contingency) influences costs. These design elements effectively turn part of the loan into a hidden grant potentially with very significant costs[xliii]. Administrative costs, such as the costs of setting up the facility and of processing and collecting loans constitute a third component. Existing research estimates the administrative costs of government-subsidised loans, be they provided by a public agency or other lenders, at 1 or 2% of the outstanding debt by several studies[xliv]. A final cost includes the costs of borrowing.

10. WHO WOULD PAY FOR THE EUROPEAN CREDIT UNION FOR STUDENTS?

These costs would be shared between the Union through a subsidy on interest rate and the graduate borrower. Table 8 presents an estimate of the costs of borrowing assuming a default rate of 27.75% and of 6%. This estimate takes into account various

sources of costs (cost of borrowing, administrative costs, default, processing costs). With a subsidy on the costs of default, students would have to bear a cost of 3.4 to 3.46% of the value of their loans. This value is close to rates in the Netherlands (3.05%), Sweden (3.1%), or Germany (5.1%)[xlv]. A subsidy on the cost of default, although costly, is important to encourage students to take up a loan with the European Credit Union as opposed to commercial banks.

Table 8: Estimates of the cost of borrowing for students (in% of the loan over a year)

	Cost assuming a default rate of 27.75%	Cost assuming a default rate of 6%
EIB costs of borrowing [1]	2.7	2.7
Administrative costs	0.26	0.2
Fee to subcontracted institutions	0.5	0.5
Cost of default	4.8	0.8
Cost if no subsidy	8.26	4.2
Cost if subsidy equivalent to cost of default	3.46	3.4

Note: this table assumes a repayment period of 8 years. The cost of default and administrative costs only includes the borrowers who repay. The costs of default presented in this table do not take into account the different assumptions made to calculate the cost of default in Figures 4 and 5.
Note 1: EIB cost of borrowing for eight years from JPMorgan (2010)

This subsidy on the costs of default could be paid for by Member states. The cost of default assuming a non-repayment in its lower bound represents only 3,48% of the budget for Erasmus Mundus. Agreeing on the amount paid by each Member state on the subsidy could be contentious because of differences in mobility patterns across the EU. Western EU member states (in particular Germany, France, Spain and the UK) send and host the majority of Erasmus students[xlvi]. And citizens from new EU member states are more likely to move within the EU for employment purposes than those from Western member states[xlvii].

Member states should therefore contribute to the cost of the subsidies proportionally to the number of Erasmus graduates who take up employment on their territory and one paid above the average national annual income. A contribution proportional to the number of students sent or hosted would provide a disincentive for states to engage in Erasmus. Graduates in employment yield direct benefits. They constitute a highly qualified workforce to increase productivity and consumption in that state. Technically speaking, member states' subsidies could originate from the EIB, for example under the form of a guarantee, or from existing EU budgets such as Erasmus (which would be under less strain covering the cost of default than they would be if they had to finance the entire costs of the lending scheme in the case of a purely centralised agency).

If member states are not inclined to subsidise student loan schemes, students would have to pay for the full costs of the loans. This cost for students would presumably not go beyond 8.26% of the value of the loan. Moreover, options could be considered to contain some of the overall costs of Erasmus, such as reducing the number of grants by making them contingent on grades or means-tested and transferring some of the budget initially allocated to grants toward loans. And several measures would be taken to lower the default rate. Students will be incentivised to repay if default affects their credit ratings, if they know that further legal action can be taken against them or if moral suasion techniques are used, such as publishing a list of defaulters[xlviii].

All parties would benefit from the European Credit Union. The Union would incur lower costs than in the second scenario where it had to take up all the aspects of the loans. Students would benefit from being able to access information and loans as easily as in national systems managed by a unique lending agency since all applications and information would be centrally managed. The

Union subsidy would lower the costs of the loans in comparison to commercial bank rates. Finally, member states would perceive the involvement of the EIB and subcontracted institutions as cost-efficient.

11. CONCLUSION

To sum up, the European Credit Union for Students would be the most cost-efficient to lenders as well as member states and accessible to students out of the options underlined above. The European Credit Union for Students would set the conditions of the loans including income-contingent repayment as well as subsidies on interest rates, subcontract institutions to manage loans and use the EIB to raise money on the capital market. This system would allow for gradual reforms, progressively opening lending to other programmes on top of Erasmus if the financial and administrative capacity of the scheme allows for it.

Further research should investigate a potential extension of this facility to finance mobility at the postgraduate level or entire courses of studies, a possibility which would fit within Treaty constraints as long as an element of studying abroad is included. Extensions to the lending facility require investigating various other aspects of European higher education, including the pricing market emerging in the European Union in higher education degrees, particularly masters' degrees[xlix].

Finally, international comparisons can help to inform how financially sustainable and expandable this scheme would be. Loans directly allocated by the federal governments in the US started in the 1990s and have drastically expanded with the adoption of the Student Aid and Fiscal Responsibility Act of March 2010. A transatlantic comparison would inform the design of a European Credit Union for Students.

Appendix 1: existing modalities of student loans in selected EU member states

Member state	Modalities of the loans	Portability to other countries	Availability to non-nationals
France	-Maintenance -Up to 15, 000 euros -Universal allocation -No academic selectivity -Repayment upon completion of the course -Government guarantees repayment up to 70% for 10 years -Positive interest rates -Debt written off	-?	-?
Germany	-Provides maintenance (643 euros/month in 2008/09) -No academic selectivity -Means-tested -No interest rate -Subsidised loans -Five years grace period from completion of a degree -Conventional-type repayment: repaid if income conditions are met -Repayment period for around 20 years -Debt written off after 20 years -Borrower must be 30 or below	-Partially (up to 1 year)	No, some exceptions for resident foreigners

UK	-Tuition fee and maintenance Tuition fee loan is equal to the amount of the tuition fees. Maintenance loan depends on the place of residence and in which year of the course the student is. For instance, for students in London 7,086 euros (GBP 6, 170), elsewhere 5, 059 euros (GBP 4, 405), living with parents 3, 922 euros (GBP 3,415) in the 2006/07 academic year. - Tuition fee loan is not means-tested but maintenance loan has a part which is means-tested (means-tested on parents' income) -Only satisfactory economic progress is required -Repayment starts in April following the completion of a degree -Repayment continues until complete - Debt is written off if the borrower left the course 25 years ago, becomes permanently disabled or dies. - Interest rate is linked to the inflation and is adjusted each year in line with the Retail Price Index. -Subsidised loans -Repayment is income-contingent - Repayment is 9 % of the earnings and starts when the student is earning above a threshold – 17, 227 euros (GBP 15,000) in 2006.	?	No
Netherlands	- Tuition fee loan is equal to the amount of tuition fee. Additional loan is up to EUR 279.69 per month in the 2008/09 academic year. The non-awarded amount of the Supplementary Grant can be borrowed. -Universal loans -Only satisfactory academic progress is required -Available to foreign students but they need to show some residency requirements - Age of the borrower must be 34 or below and must have started studies before age 30. -2 years of grace period -Average repayment period of 15 years -Interest rates are fixed for a period of 5 years starting from the year of graduation. Afterwards they are updated every 5 years by the IB-Groep. -Subsidised loans - Conventional-type. Monthly repayments depend on the initial debt and the interest rate. -Remaining debt is written off after 15 years	Yes	Yes but students need to comply with some residential conditions
Sweden	- Both tuition fee and maintenance 131 EUROS (SEK 1, 230) per week. Additional loans are available for extra costs or for students above age 25 and who has worked before -Means-tested loans on students' own income -Only satisfactory academic progress is required -Available for non-nationals - Financial assistance is available for 240 weeks and until the student turns to 54. Eligibility for a loan is limited starting from the year the student becomes 45. -6 months grace period	-Yes	-Yes

	-Repayment to last 25 years or until the borrower reaches the age of 60 - The Government sets the interest rate every year based on its average borrowing costs over the past three years. The interest is compounded starting from the first disbursement. Each year, the unpaid interest is capitalized. Government subsidizes interest rate by 30 percent both during the study and repayment period. - Modified annuity loan system. Amounts to repay are calculated annually based on borrower's outstanding debt, number of years remaining on the loan, the interest rate and an annual escalator. - No income threshold at which loans are not repaid -Borrowers can apply to reduce the repayment amounts to a maximum of 5 percent of income if they face difficulties in repaying (7 percent for borrowers over 50).		
Hungary	-Tuition fees and maintenance - Annual amount was between 367 euros (HUF 100, 000) and 1474 euros (HUF 400, 000) for state-financed students and 1843 euros (HUF 500, 000) for non-state financed students in academic year 2007/08. -Universal allocation Academic selectivity is implicitly taken into consideration -Borrower must be 40 or below -3 months grace period -On average length of repayment of 15 years - Variable interest rate based on the cost of borrowing, revised twice a year and compounded annually. Interest accrues from the day the disbursement begins until the loan is repaid in full. -Unsubsidised loans - Lagged income-contingent. Unemployed people still pay a percentage of the minimum wage -6/8% of salary income -Debt written off if borrower retires becomes disabled or dies. - If the student cannot receive his/her degree within 10 years grants are treated as interest-bearing loans.	-Yes	-No

Source: European Investment Bank (2008) and Hoareau (forthcoming)

Appendix 2: student loan management in selected EU member states

Member state	Type	Institution	Provider public or private	Details
Germany	Centralised	BAFöG Kreditanstalt für Wiederaufbau (KfW)	Public	-Collection through BAFöG -Kreditanstalt für Wiederaufbau (KfW), owned jointly by the Federal republic and the federal states (Länder) also offers various loan products for students to help cover the costs not covered by BAFöG
UK		Student Loans Company -In partnership with the local authorities in England and Wales, the Student Award Agency in Scotland and the Education and Library boards in Northern Ireland.	Public	-Repayments are collected through the income tax and the Student Loans Company administers repayments.
Netherlands		Informatie Beher Groep (IB groep)	Public	-Collection through IB-Groep. After 3 months of default, the national debt collection mechanism is employed.
Sweden		National Board of Student Aid (in Swedish Centrala Studiestodsnamnden-CSN)	Public	-Collection through CSN. Tax system is not used for collection.
Hungary		Diákhitel Központ (Student Loans Company)	Public	-Central independent non-profit organisation collects loans -Diákhitel Központ disburses loans directly to student's bank account. It also manages students loans as a financial product -The tax authority provides income data to Diákhitel Központ which collects the repayment. In the event of default, the tax authority takes over for the recovery of the debt.
France		Decentralised / mixed	Private	-Commercial banks allocate loans -a public agency, Oseo, provides a guarantee

Source: European Investment Bank (2008) and Hoareau (forthcoming)

ENDNOTES

[i] Commission, 2010; OECD, 2010: 327.
[ii] Student mobility includes the movement of international students who travelled to a country different from their own for the purpose of tertiary education (OECD, 2010: 208).
[iii] Council 2008; Council, 2009; Ministers responsible for higher education, 2009.
[iv] Commission, 2006; Souto-Outero, 2008; Teichler and Jahr, 2001.
[v] Estimated value of the Erasmus grant for 2009/10.
[vi] Students, typically undergraduates, have the option of spending an academic year abroad as part of their degree under the Erasmus programme.
[vii] Souto-Outero and McCoshan (2006: 47). A recent Eurobarometer survey found that 6% of students were deterred from a period abroad because of lack of funding (Eurobarometer, 2009).
[viii] See appendix 1. Member states making their grants and/or loans fully portable include Nordic countries, Germany, Belgium, Finland, and Ireland (Cluster, 2008: 8).
[ix] Souto-Outero and McCoshan, 2006:5. Grants are even scarcer for students who wish to spend the entirety of their studies abroad. Some member states may fund part of their studies through a merit-based scholarship scheme for incoming and outgoing students, including postgraduate education; with an expectation of return in the country of origin (Regional councils of bodies such as Egide in France have similar schemes).
[x] Generally speaking, the European Union was less successful at promoting redistributive policies than market related ones, the reason being that redistributive policies create a zero sum game situation, where some member states win at the expense of others, while economic policies (such as the creation of a single market) are perceived as improving pareto optimality (Hix, 2005).
[xi]Commission, 2009b.
[xii] The benefits of mobility are wide-ranging and partly documented earlier. They include having a skilled workforce and welcoming students which boost consumption
[xiii] High Level Expert Forum on Mobility, 2008; Cluster, 2008; European Commission and European Investment Bank, 2009.
[xiv] Some studies use an academic year of 40 weeks (Souto-Outero and McCoshan, 2006). This paper assumes that moving to another country requires an additional four weeks outside the academic year.
[xv] Friedman, 1955.
[xvi] Souto-Outero and McCoshan, 2006:47.
[xvii] European Commission, 2006
[xviii] Johnstone, 2009
[xix] Barr, 2004; Chapman and Tulip, 2008; OECD, 2008.
[xx] Barr, 2004.
[xxi] Or is likely to attract buyers specialised in investing in riskier assets.
[xxii] SLC, 2009. According to the House of Parliament (2008), this debt was expected to increase in value to 62.20 billion euros over the next ten years.
[xxiii] Johnstone, 2009; Lyall, 2009:87.
[xxiv] For statistics on the minimal wage across EU member states, see Eurostat (2010b: 99).
[xxv] This calculation assumes that his repayment only includes the principal value of this debt. A repayment rate of 5% is assumed for illustrative purposes only.
[xxvi] Barr, 2004; Shephard, 2010.
[xxvii] Further research is necessary to determine whether this loan is portable across the EU at the same rate. The rate of BNP is relatively low probably because of the guarantee required (from parents or the Government).
[xxviii] Browne, 2010.
[xxix] Price sensitivity, or price elasticity of demand, is the effect a change in price will have on borrowers.
[xxx] Barr, 2004.
[xxxi] And 80% of the EU budget is managed within member states.
[xxxii] Barr, 2004.
[xxxiii] Interest rates vary according to the ability of the lenders to sell the student related debt.
[xxxiv] Artz, 1995; Shephard, 2010.
[xxxv] E.g. General Council of Creuse in France, http://www.creuse.fr/article13.html
[xxxvi] Commission, 2008: 8. The operational programme from the European Social Fund for the period 2007-13 includes the possibility to fund learning mobility in higher education under Priority 1: Education and training.
[xxxvii] Cluster, 2008: 22.
[xxxviii] The lending agency collects payments itself but calls up tax authorities in case of late payments in the Netherlands.
[xxxix] This figure is computed for graduates who have had at least one tax year from graduation.
[xl] SLC, 2010:16.
[xli] Eurofound, 2006:14.
[xlii] The definition of default adopted in the US clearly affects the announced rate.
[xliii] Barr and Falkingham; 1993; 1996; Johnstone, 1989.

[xliv] Ziderman and Altbrecht, 1995; Shen and Ziderman, 2009.
[xlv] EPI, 2005.
[xlvi] DG EAC, 2010.
[xlvii] Eurofound, 2006: 26.
[xlviii] Shen and Ziderman, 2008.
[xlix] Douglass and Keeling, 2008.

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